

A Jumpstarter on How to Search PubMed and PubMed Central (PMC) for Research on Alzheimer's Disease

What is PubMed?

PubMed

- One among numerous databases of peer-reviewed, evidence-based research and expert opinion
- Maintained by the National Library of Medicine
- Located at <http://www.ncbi.nlm.nih.gov/pubmed>
- Free
- Contains over 63,000 indexed citations on Alzheimer's disease
- Most with abstracts

What is PubMed Central ([PMC](#))?

PubMed Central (PMC)

- Maintained by the National Library of Medicine (NLM)
- Full-text articles and research that must meet scientific and technical standards
- Free
- Sub-set of PubMed (11,500 major articles on Alzheimer's with full-text)
- Final versions of NIH-funded articles as mandated by legislation
- Final versions of articles from publishers available through open access
- Provides [Journals](#) in 3 categories
 1. complete contents of selected titles and issues
 2. back issues (prior to the late 1990s)
 3. complete issues and volumes for recent issues but not for early years

Why search PubMed or PMC for Alzheimer's research?

To find:

- background on topics, terms, and concepts
- standards of care, interventions, and programs
- guidelines and practice recommendations
- evidence-based research for presentations, article writing, grant work, college & university course work
- statistical data
- experts in a field
- bibliographies/reading lists
- verification of citations
- and for keeping up-to-date on current research

What is MeSH and why is it useful?

MeSH

- **M**edical **S**ubject **H**eadings is an online database used by the National Library of Medicine to assign search words and terms to scientific papers
- helps identify research studies faster
- contains major terms called “headings” and narrower terms called “subheadings” to better define your search
- can do even more for you!

- MeSH provides “scope notes” (definitions) for hard-to-understand medical and scientific terms, like “epidemiology” or “meta-analysis”
- MeSH maps to related term(s) automatically to help you run a better search.

e.g.

- “treatment” is mapped to “therapy” and “therapeutics”
- “dementia” is mapped to “alzheimer disease”
- “training” is mapped to “education”

Search these bold-faced terms for Alzheimer's disease

- **alzheimer disease [mh]** (as a MeSH heading)
- **alzheimer disease [majr]** (for major studies)
- **Carrillo MC [au]** (to search by author)

If using **[mh]** sends back too few results, try searching without it.

Example:

alzheimer disease [mh] AND caregivers [mh]

~~alzheimer disease [mh] AND caregivers~~

Use these terms when they fit your topic

[MeSH](#) contains these terms that can be useful for finding Alzheimer's research

- alzheimer disease
- intervention studies
- standards of care
- quality of life
- practice guidelines
- randomized controlled trial
- clinical trials, phase III
- longitudinal studies
- review
- statistics
- caregivers
- ...and terms related to LTC

MeSH does not contain the terms below - so enclose them in parentheses, quotation marks, or in combination with OR

- cognitive decline
- care
- outcomes
- (staffing OR personnel)
- (intervention OR strateg* OR "best practice")
- (program OR demonstration)
- (benefit OR efficacy OR effectiveness)
- (support OR outreach)

Use these terms to find “best practices”

- standards
- guidelines
- protocols
- “standards of care”
- “consensus statement”
- “gold standard”
- “process improvement”
- Benchmarking [mh]

Development of a Best Practices Search Filter in PubMed. IN:
Manitoba Libraries, 1.1, pg. 24 .

<http://www.mla.mb.ca/content/manitoba-libraries-11>

Find systematic reviews in [PubMed Health](#)

- PubMed Health is another service that incorporates:
 - abstracts and full-texts
 - reviews that cover the “effects of” treatments
 - plain language summaries
 - consumer information based on systematic reviews
- use this filter to construct your search: **pmh_sr[sb]**
- examples:
 - dementia AND pmh_sr[sb]**
 - dementia AND "staff training" AND pmh_sr[sb]**
- find more information [here](#).

Try the [Yale MeSH Analyzer](#)

- a web-based tool to refine the results of searches*
- each PubMed entry has a **PMID (PubMed Identifier)** / ID number
- example: PMID: 26398086
- the analyzer can compare PMIDs side-by-side, displaying, among other things, the publication dates and the MeSH headings across all the PMIDs (therefore the citations) being analyzed
- it is most helpful for comprehensive database searches and systematic reviews

*developed by Yale librarians,
Lei Wang and Holly Grossetta Nardini

Try [MeSH on Demand](#)

Use *MeSH on Demand* to find MeSH headings (terms) related to your topic.

- open MeSh on Demand.
- paste some text into the tool, such as an abstract or a paragraph that has words or terms you may want to search.
- click the “Find MeSh Terms” button.
- the NLM Medical Text Indexer (MTI) will return a list of MeSH Terms relevant to your text.
- continue your search using the Terms from the list or link to the Related Citations by their PMIDs.

Search Workbench

Search Workbench allows you to examine, edit and visualize your PubMed searches from a single interface

- each search you enter is displayed as a Venn diagram and a line graph.
- shows how your results change over time.
- compare completed searches to one another.
- facilitate the process of fine-tuning a search strategy.

Use filters like “article types” and “publication dates” to limit your search for even better results

Resources How To murbashi My NCBI Sign Out

PubMed (alzheimer or dementia) Search

RSS Save search Advanced Help

[Show additional filters](#) **Display Settings:** Summary, 20 per page, Sorted by Recently Added **Send to:** **Filter your results:**

[Clear all](#) All (69933)

Article types [English & Humans \(52530\)](#)
Clinical Trial [Free Full Text \(18903\)](#)
Review [Full text \(64278\)](#)
More ... [Review \(13093\)](#)

Text availability [Manage Filters](#)
Abstract available
Free full text available
Full text available

Publication dates [clear](#)

10 years
Custom range...

Species
Humans
Other Animals

[Clear all](#)

[Show additional filters](#)

Results: 1 to 20 of 69933 << First < Prev Page 1 of 3497 Next > Last >>

Filters activated: published in the last 10 years [Clear all](#)

[Potential for misdiagnosis in community-acquired PET scans for dementia.](#)

1. Shipley SM, Frederick MC, Filley CM, Kluger BM.
Neurol Clin Pract. 2013 Aug;3(4):305-312.
PMID: 24195019 [PubMed]
[Related citations](#)

[Clinical trial of a home safety toolkit for Alzheimer's disease.](#)

2. Horvath KJ, Trudeau SA, Rudolph JL, Trudeau PA, Duffy ME, Berlowitz D.
Int J Alzheimers Dis. 2013;2013:913606. doi: 10.1155/2013/913606. Epub 2013 Sep 29.
PMID: 24195007 [PubMed]
[Related citations](#)

[Nodes and biological processes identified on the basis of network analysis in the brain of the senescence accelerated mice as an Alzheimer's disease animal model.](#)

3. Cheng XR, Cui XL, Zheng Y, Zhang GR, Li P, Huang H, Zhao YY, Bo XC, Wang SQ, Zhou WX, Zhang YX.
Front Aging Neurosci. 2013 Oct 29;5:65. doi: 10.3389/fnagi.2013.00065.
PMID: 24194717 [PubMed]
[Related citations](#)

New feature [Sort by Relevance](#)
Try the new Display Settings option -

Results by year

Download CSV

There are dozens of ways to run a search. Here are a few. Practice these and discover your own.

Search using MeSH headings – [mh]

alzheimer disease [mh] AND nursing homes [mh]

Search with or without operators (AND, OR, NOT)

“nursing homes staffing” can also be used for “nursing homes AND staffing”

Search free text by inserting quotation marks

(“nursing homes” OR “long term care” OR “skilled nursing facilities” OR “residential care facilities”)

Use subheadings found in MeSH

cholinesterase inhibitors/adverse effects
alzheimer disease/etiology

Search here and find out more

- [PubMed](#)
- [PMC](#)
- [MeSH](#)
- [PubMed Help](#)
- Bookmark these tools for easy access through the Virtual Library under [Search Databases](#)